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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,114	11/19/2003	Larry D. Beller	CON735.0001	7330

34487 7590 02/13/2006

BRENT A. CAPEHART  
LaRiviere, Grubman & Payne, LLP  
19 Upper Ragsdale Drive, Suite 200  
P.O. Box 3140  
Monterey, CA 93940

EXAMINER

STERLING, AMY JO

ART UNIT PAPER NUMBER

3632

DATE MAILED: 02/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/717,114

Applicant(s)

BELLER, LARRY D.

Examiner

Amy J. Sterling

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 5 and 6 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10 is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This is the **Final Office Action** for application number 10/717,114 Removable Balancing Assembly for Rotating Cylindrical Structures filed on 11/19/03. Claims 1-10 are pending. Claims 5 and 6 are withdrawn. This **Final Office Action** is in response to applicant's reply dated 11/23/05. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Applicant's amendment necessitated any new ground(s) of rejection presented in this Office action.

### ***Drawings***

The drawings were received on 11/23/05. These drawings are acknowledged and accepted.

### ***Claim Objections***

Claims 1, 5 and 6 are objected to because of the following informalities:

Claims 5 and 6 contain an incorrect status identifier. The only acceptable status identifiers can be selected from the following list: Canceled, Currently Amended, Previously Presented, Original, New, Withdrawn, Withdrawn-Currently Amended or Not Entered.

Claim 1 recites, "the slots equals the number of said plurality of radially aligned projections and spaced about the interior surface" and this should be changed to "the

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slots equals the number of said plurality of radially aligned projections and are spaced about the interior surface”.

Claim 1, line 7 recites, the “annual ring” which should be changed to “annular ring”.

***Claim Rejections - 35 USC § 103***

Claims 1, 2, 4 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 4608170 to LaValley.

The patent to LaValley discloses flange including an annular ring (98) having a rim (102, 104, 105) and a plurality of four radially aligned projections (126) circumferentially spaced approximately 90 degrees apart on the rim, a circular well (circular well created by (130)) in the frame dimensioned to receive the annular ring, the circular well having a plurality of four slots (128) spaced about an interior surface of the well, wherein the number of slots is equal to the number of projections, and the projections move axially within their respective slots as the rotating member rotates. The projections (126) which can be axially adjusted while the rotating member is rotating for balancing. LaValley also discloses a motor force means (See Col. 5, lines 59-61, for gear box (36, 38) and motor).

LaValley does not specifically disclose wherein a centerline of a motor force means is aligned with a centerline of a rotating member. LaValley does state that the motor force means is located at the discharge end of the drum and this is Official Notice that it would be obvious for one of ordinary skill in the art at the time of the invention for

the centerlines of the rotating member and the motor force means to be aligned in order to keep the device balanced.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 4608170 to LaValley as applied to claim 1 above, and in view of United States Patent Publication No. 2005/0035536 to Suga et al.

LaValley discloses applicant's basic inventive concept, all the elements which are shown above and including a rotating cylindrical drum (14) with the exception that it does not show that the motive force means is at both ends of rotating cylindrical drum.

Suga et al. teaches a rotating cylindrical drum (2) with dual motive force means at each end (24, 17, 27, 19, 15, 16) for driving each end equally. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made from the teachings of Suga et al. to have used the motive force means at both ends to drive a cylindrical drum.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-4 and 7-9 have been considered but are moot in view of the new ground(s) of rejection.

### ***Allowable Subject Matter***

Claim 10 is allowed.

The prior art does not teach wherein the annular ring has radially aligned bores and the projections are received in the bores with a frame with a circular well, wherein the well has the same number of slots on an interior surface as the number of bores and projections and receives the projections in sliding engagement.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action. Any inquiry concerning this communication should be directed to Amy J. Sterling at telephone number 571-272-6823. The examiner can normally be reached (M-F 8 a.m.-5:00 p.m.). If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Leslie Braun can be reached at 571-272-6815. The fax machine number for the Technology center is 571-273-8300 (formal amendments) or 571-273-6823 (Informal communications). Any

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inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist at 571-272-3600

A handwritten signature in cursive script, appearing to read "Amy J. Sterling".

Amy J. Sterling

2/3/06